GOVERNMENT OF KARANATAKA BRUHATBENGALURUMAHANAGARAPALIKE

REQUESTFORPROPOSALSFORTHECONSULTANCYASSIGNMENT

Appointing Consultancy services for preparation of Detailed project report (DPR) including estimation for the work of "Construction of Electrical Animal Crematory in BBMP Limits" (Project cost Rs. 8.25Crs).

ClientDetails

O/o Executive Engineer-3,
Health and Sanitation, BBMP Head Office,
#408, Annex-3 Building, 4th Floor,
N.R.Square, Bengaluru-560002

BRUHAT BENGALURU MAHANAGARA PALIKE

Office of Executive Engineer-3, Health and Sanitation, BBMP Head Office, #408, Annex-3 Building, 4th Floor, N.R.Square, Bengaluru-560002

No: BBMP/EE-3/H&S /TEND/03/2025-26 Date: 18.07.2025

INVITATION FOR TENDER (IFT)

(Two Cover System)
(Through GOK KPP Portal Only)

1. The Executive Engineer-3, Health and Sanitation on behalf of the Chief Commissioner, Bruhat Bengaluru Mahanagara Palike (BBMP), invites proposals (Technical and Financial) for appointing Service Provider for Consultancy services for preparation of Detailed project report (DPR) including estimation for the work of"Construction of Electrical Animal Crematory in BBMP Limits"detailed in the table below.
2. The detailed objectives and the scope of the assignment shall be as per Request for Proposal (RFP) Document and it may be downloaded from the Government of Karnataka Website www.kppp.karnataka.gov.in. The RFP Document can be downloaded in the Portal as per the prescribed Date and Time published in the Portal.
3. Proposals must be submitted online through KPP portal on or before**16:00 hours on 29.07.2025** and the opening of bids will be as per the KPP portal guidelines.
4. Other details can be seen in the RFP document.

TABLE

Sl. No.	Name of the Project	Tendered Cost Rs. n Lakhs	EMD Amount (in Rs)	Period of completion
1	Consultancy services for preparation of Detailed project report (DPR) including estimation for the work of "Construction of Electrical Animal Crematory in BBMP Limits"(Project cost Rs. 8.25Crs).	4,12,500.00	10,350.00	30 Days

Calendar of Events

- Availability of RFP Document from **18.07.2025 onwards**.
- Last Date for Receipt of Queries **24.07.2025 up to 15:00 hours**
- Date of Pre bid meeting at the office Special Commissioner (H &S) on **24.07.2025 at 15.30 hours.**
- Last Date for receipt of Tenders is **29.07.2025 before 16:00 hours**
- Date of Opening of Technical Proposals is **30.07.2025 on 16 :30 hours**
- Date of Opening of Financial Proposals after Approval of Technical Proposals through KPPP .

Note:

I. Participants shall upload all the Signed and Scanned Copies of Certificates pertaining to their Eligibility Criteria, Essential Conditional Criteria, Financial Criteria Documents, etc. No Physical Documents shall be considered. Participants shall produce all the Original Documents for Verification whenever necessary.

II. For those Bidders whose Technical Bids do not satisfy the Eligibility Criteria as mentioned above, their Financial Bids will not be opened.

III. The BBMP reserves the right to reject any or all of the Tenders without thereby incurring any Liability or Obligation to inform the Bidders of the Reasons for such action.

IV. Bidders may obtain further information at the Office of Executive Engineer-3, Health and Sanitation ,BBMP Head Office, #408, Annex-3 Building, 4th Floor Bruhat Bengaluru Mahanagara Palike, N.R. Square, Bangalore – 560002on all working days between working hours.

V. Corrigendum's/Modifications/Corrections, if any, will be published in the Website only.

VI. For Details, Registration and e – Payment, visit GOK Websitewww.kppp.karnataka.gov.inor contact KPPP Helpdesk at 080 – 25501216 / 25501217.

Sd/-
Executive Engineer-3
Health and Sanitation
Bruhat Bengaluru MahanagaraPalike

Instructions toTenderers

The "Consultant" herein means either an individual Consultant or a firm or a company. The blank tender documents can be downloaded / obtained through website **https://kppp.karnataka.gov.in** and can be submitted through electronic tender only.

Cover-1-Technical bid-Upload duly filled all sections of Tender with any supporting documents
Cover-II– Financial Proposal: Financial bid shall contain duly filled financial bid as displayed in KPPP portal

The Cover-I (Technical bid) will be opened first and there after Cover-II (Financial bid) of only those bidders who fulfill the qualification criteria and other conditions as mentioned in the tender document will be opened.

While preparing the Technical Proposal, Please upload the following documents along with Tender Documents.

i. Duly filled Tender document with sign and seal on each page.
ii. Authorization Certificate who is responsible to fill the Tender document
iii. Consultant should confirm the technical proposal as per Data Sheet and TOR
iv. A valid copy of the registration of the Individual/Firm/Company with the register of Companies.
v. Latest copy of the Income Tax return for last five (5) years.
vi. PAN and GST registration copy.
vii. ISO 9001:2015 Certificate for providing Architectural and Structural Design services related to the project.
viii. The consultancy firm shall have experience in the preparation of Detailed Project Reports and Architectural and Civil Engineering Consultancy for a minimum of 10 years. As proof, a service tax registration certificate should be provided.
ix. Consultant should have completed for preparation of Detailed project report (DPR) including estimation for the work of "Construction of Electrical Animal Crematory" with pollution control board norms and other prevailing standards.
x. Consultant should have one single Work fortotal Value of Consultancy amount is not less than Rs. 2.5 Lakhs during last 5 financial year ie2020-21 to 2024-25, the work done certificate should be obtained duly signed from an officer not below the rank of Executive Engineer of the Concerned Division.
xi. The Consultant should have good experience in the Preparation of Design, estimation and DPR in the field of preparation of Detailed project report (DPR) including estimation for the work of "Construction of Electrical Animal Crematory in BBMP Limits".
xii. Achieved a minimum annual financial turnover of at least Rs. 10.00 Lakhs in any two financial years of the last 5 years. The consultant shall furnish the financial turnover along with certified copies of the Audit Report, Balance Sheet, and Profit and Loss Statement by a Chartered Accountant with UDIN.
xiii. Consultant should have work experience in the preparation of DPR experience in metropolitan city of population more than 15 lakhs.
xiv. No Joint Ventures are allowed.

xv. Consultant should have Own or Lease NSV Survey Vehicle.

xvi. Each and all the documents uploaded to the e-portal should be ATTESTED BY A NOTARY.

xvii. Work Done Certificates shall be enclosed for the above, duly certified by the officer not below the rank of Executive Engineer.

xviii. The proposal should be based on the number of professional/staff-months estimated by the consultant firm. Proposed professional staff must have at least the experience indicated in the Data Sheet. Key professional staff proposed will upload one curriculum vitae (CV) with Aadhar Card and Degree Certificate.

xix. Reports to be issued by the consultants as part of this assignment must be in the language(s) specified in the Data Sheet.

xx. All the eligible applicants will be called for a presentation on the Concept Plan for the current project and already executed projects and experience. The consultant will have to make a presentation on the methodology adopted, scope of work, and strategies adopted to arrive at the solution.

xxi. After preparing the DPR, the consultant should get approval on the DPR from the selection committee before finalizing and submitting the final copy to BBMP. The selection committee is constituted by BBMP, with representatives from the Health Department and other related departments. The committee shall scrutinize and approve after a series of deliberations if the DPR meets the requirements.

xxii. The technical bids of all bidders who have uploaded the tender along with all relevant documents will be considered in the technical evaluation. However, prior to the awarding of the work, the L-1 bidder would be asked to produce the original documents in support of the uploaded documents to enter into the agreement.

xxiii. In preparing the Technical Proposal, consultants are expected to examine the documents comprising this RFP in detail. Material deficiencies in providing the information requested may result in the rejection of a proposal. If the bidder does not produce the original documents for entering into an agreement, then their bid will be treated as non-responsive as per Clause 26(A) of the KTPP Rules. The names of the bidders... Who do not produce the original documents will be removed from the select list of enrollments and barred from participation in any of the tenders to be invited, apart from forfeiting the EMD, paid through e-cash.

Cut-offdatesforthetenderprocess:

Sl. No.	CalendarofEvents	Dates&Time
a.	TheConsultant can have access to the e-tender document,i.e.theTender schedules, bid documents and other documents in the web site https://kppp.karnataka.gov.in/onpayment of transaction fee (non-refundable)	
b.	Pre-Bid Date &Time forTender	24.07.2025 @ 15.30 Hours
c.	Last Date &Time for Tender Queries/Clarifications	24.07.2025 before 16.00 hours
d.	Date of opening of Technical Bid	29.07.2025 on 16 :30 hours
e.	Date of PPT Presentation to Committee	The Date will be intimated Later to the eligible bidders.
g.	Date of opening of Financial Bid	The Date will be intimated later

SECTION1.LETTEROFINVITATION

Dear Consultant

a. The Executive Engineer (Health and Sanitation) on behalf of the Chief Commissioner, Bruhat Bangalore Mahanagara Palike(BBMP),invites Proposals to provide the following Consulting Services by Consultancy services for preparation of Detailed project report (DPR) including estimation for the work of "Construction of Electrical Animal Crematory in BBMP Limits"(Project cost Rs. 8.25Crs).More details on the Services are provided in the attached Termsof Reference.

b. List of consultants will be selected after review of the Technical Bid.

c. A consultant will be selected under Least Cost Selection (LCS) procedures described in this RFP.

d. TheRFPincludesthefollowingdocuments:

Section 1 - Letter of Invitation
Section2-Information toConsultants
Section3-TechnicalProposal-StandardForms
Section 4 - Financial Proposal - Standard Forms Section 5 - Terms of Reference
Section6-StandardFormof Contract.

6. Pleaseinform us,upon receipt:

- That you received the letter of invitation; and
- Whether you will submit aproposal alone or in association with other entity as Joint Venture with joint and several responsibilities.

Sd/
Yourssincerely,
Executive Engineer-3,
Health&Sanitation,BBMP

DATASHEET

Information toConsultants

1.1 The name of the Client is:
Name: Office of Executive Engineer-3,Health and sanitation, BBMP Head office,#408, Annex-3 Building,4th Floor N.R.Square, Bengaluru-560002

1.1 A Themethodofselectionis: LeastCostSelection(LCS)

1.2 A Technical and a Financial Proposals are requested: **Yes**

Tender documents may be downloaded from Government of Karnataka Public Portal website https://www.kppp.karnataka.gov.in under login for Contractors

The name, objectives and description of the Assignment are: Consultancy services for preparation of Detailed project report (DPR) including estimation for the work of "Construction of Electrical Animal Crematory in BBMP Limits"(Project cost Rs. 8.25Crs).

Projectamount:Rs.4,12,500/-

1.3 TheAssignmentisphased:**No**

1.4 A pre-proposal conference will be held: Yes
The name(s), address(es), and telephone numbers of the Client's Official(s) are:
Name: Anil Kumar, Executive Engineer (Health and Sanitation)
Phone: 9880983448
Email: eeswmbbmp@gmail.com

Office Address:
Office of Executive Engineer-3,
Health and sanitation, BBMP Head office,#408, Annex-3 Building,
4thFloor N.R.Square,
Bengaluru-560002

1.5 **The Client will provide the following inputs:**

- All inputs and questions from the consultant regarding the tender document will be posted on the KPPP website and can be viewed with login. The same will be answered on the portal.
- Please refer to the tender documents which are downloaded from the Government of Karnataka Public Portal website https://www.kppp.karnataka.gov.in under the login for Contractors.
- The Technical Proposal, along with EMD and financial bids, are to be uploaded as per the instructions in the Tender document.

1.**6** **The Client envisages the need for continuity for downstream work:** No

1.7 **The clauses on fraud and corruption in the contract are Sub-Clause 2.7.1 of G.C.C.**

2.1 Clarifications may be requested up to: [date]

Please refer to the portal for detailed updates on dates or contact the below Executive Engineer-3:

Office of Executive Engineer-3,
Health and sanitation, BBMP Head
office,#408, Annex-3 Building,
4thFloor N.R.Square,
Bengaluru-560002

3.1 Proposals should be submitted in the following language(s): English

(a) Shortlisted Consultant may associate with another shortlisted Consultant: **No**

(b) The estimated number of key professional staff-months required for the assignment is: **As per TOR**

(c) The minimum required experience of proposed key professional staff is: **As per TOR**

(d) Reports which are part of the assignment must be written in the following language: **English**

(e) Training is an important feature of this Assignment: **No**

(f) Additional Information in the Technical Proposal includes: **Please refer to TOR and Data Sheet**

3.2 Proposals must remain valid for 90 days after the submission date.

3.3 Consultants must submit an original and 5 additional copies of each proposal.

3.4 The proposal submission address is: Tender documents may be downloaded from the Government of Karnataka Public Portal website https://www.kppp.karnataka.gov.in under login for Contractors, and the same should be submitted on the portal itself. Applicants can view and download the complete proposal document from the Government of Karnataka e-procurement portal https://kppp.karnataka.gov.in.

3.5 Proposals must be submitted no later than the following date and time:
Please refer to the website https://www.kppp.karnataka.gov.in for updates on this proposal.

3.6 The address to send information to the Client is:
Please refer to the website https://www.kppp.karnataka.gov.in for updates on this proposal or

Office of Executive Engineer-3,
Health and sanitation, BBMP Head office,
#408, Annex-3 Building,
4thFloor N.R.Square,
Bengaluru-560002

3.7 Pre-bid meeting will be held on 24-07-2025, 15:30 Hrs IST at:
Office of Executive Engineer-3,
Health and sanitation, BBMP Head office,#408, Annex-3 Building,
4thFloor N.R.Square,
Bengaluru-560002

3.8 Address for Negotiation is:

Office of Executive Engineer-3,
Health and sanitation, BBMP Head office,#408, Annex-3 Building,
4thFloor N.R.Square,
Bengaluru-56000

3.9 The assignment is expected to commence in July 2025 at Location: Bengaluru.

The number of points to be give under each of the evaluation criteria are:

Sl.No	Description	Points/Marks
1	**Past Experience of the Consultant working on Electrical Animal Creamtory**	**10**
a	No experience in last 10 years	0
b	Havingexperience in last 10 years	10
2	**Consultant Financial Capacity / Turn Over in the last 5years(in INR)**	**10**
a	05 to 10 lakhs	5
b	10 lakhs and above	10
3	**Specific experience of the Consultants related to the Assignment**	**15**

a	DPR prepared for single project work and cost of the project executed in INR in the past **5years**(Consultant should have experience in preparing DPR for "Construction of Electrical Animal Crematory" Work done in Govt, Semi Govt, EPC/Turnkey Subcontract etc to be submitted signed not below the rank of Executive Engineer)	
	5 Cr to 10Cr	10
	10 Crand above	15
4	**Qualifications and competence of the key professional staff for the Assignment**	
A	Skills and Experience in **Architectural Design** of Electric Animal Crematory and supporting facilities in accordance with FSSAI, NBC, CPCB, and municipal norms. **Civil Engineering** including structural design, foundation systems, circulation planning, and drainage. **MEP Engineering** (Mechanical, Electrical, and Plumbing) with specific experience in, Electric resistance coils, Ash Pit, Exhaust System, ETP (Effluent Treatment Plant). **Fire Protection System Design:**Fire hydrant system **or** modular fire suppression (CO_2 or clean agent) in electrical rooms, Safety Signage and Interlocks. **Design of STP/ETP** (Effluent Treatment Plant / Sewage Treatment Plant) tailored for Animal Crematory waste like Ash particles, hair, bones, fibrous solids (Oil, Grease & Ash Trap)**.Methodology for Selection of Equipment** related cremation, emission control, waste handling, and safety — aligned with regulatory norms and operational efficiency. **Preparation of BOQs** (Bill of Quantities) based on KPWD SOR and market rates for all components (civil, MEP, equipment). **Preparation of Technical Drawings using CAD tools** (AutoCAD, Revit, BIM, etc.) covering architecture, structural, services, utilities, etc.	**40**
5	**Location Registered Office**	**5**
	Registered office in Bangalore	5
	Registered office outside Bangalore	2
6	**PPT- Live Presentation** consisting of **Proposed Work Plan and Methodology** specific to Electric Animal Crematory infrastructure and operations. **Relevant Experience Details** in Electric Animal Crematory projects (Govt/Semi-Govt /EPC /Turnkey) .**Technical Approach and Design Concepts** for hygienic design, waste management, utilities, and animal handling. **Design Strategies Used**, including covering architecture, engineering, compliance, sustainability, Equipment zoningetc. **Space Management Techniques** for optimizing carcass flow, cold chain, staff movement, and segregation of zones. **Space Management Techniques** for operational efficiency, regulatory compliance, hygiene, and user sensitivity, cold chain, staff movement, and segregation of zones. **Availability of Qualified Working Manpower** to execute the project within stipulated timelines. **Details of Similar Works Completed** in the past, along with outcome and performance. **Competency and Technical Capability** of the team proposed for the assignment. **Financial Strength & Turnover Details** supporting the applicant's ability to deliver the project.	**20**
	TotalPoints:	**100**
The minimum technical core required to pass is:		**75 Points**

Thenumberofpointstobegivenforqualificationsandcompetenceofthekeyprofessionalstafffor the assignment are:

Sl. No.	NumberofKeyprofessional	Qualification	Experience	Marks
1	Project co-coordinator cum Chief Architect -2 Nos	B. Archor M.Arch from recognized University	a) minimum5yearExperienc e. 5 to 10 Year- 5 Marks b) Morethan10YearExperience-10Marks	10
2	Senior Structural Design Engineer 2 Nos	M.E in Structural engineering equivalentfromrecognized University	a) minimum5yearExperienc e. 5 to 10 Year- 5 Marks b) Morethan10YearExperience-10Marks	10
3	Geotechnical Engineer-1Nos	M.E in Geotechnical engineering equivalentfromrecognized University	a) minimum5yearExperienc e. 5 to 10 Year- 2 Marks b) Morethan10 Year Experience5Marks	5
4	Civil/QuantitySurveying Engineer – 3 Nos	B.EinCivilengineeringorequivalent from recognized University	a) minimum5yearExperienc e. 5 to 10 Year –2 Marks b) Morethan10Year Experience-5Marks	5
5	ElectricalEngineer–2Nos	B.E in Electrical engineering or equivalentfromrecognized University	a) a)minimum5yearExperienc e. 5 to 10 Year- 2 Marks b) Morethan10Year Experience-5Marks	5
6	MEP/Sanitry Engineer – 2 Nos (Water supply, Sanitary, Solid wasteManagement,FireFighting & HVAC)	B.EinCivil/Mechanicalengineering or equivalent from recognized University	a) a)minimum5yearExperienc e. 5 to 10 Year- 2 Marks b) Morethan10Year Experience-5Marks	5
		TOTAL		**40**

I. APPENDICES

Appendix A: Description of the Services

1. Project Background

The Government of Karnataka (GOK) has plans to upgrade the existing Electrical Animal Crematory around Bangalore within BBMP limits. As a first step to this initiative, tenders are invited to select the consultants to prepare a Detailed Project Report for Construction of Electrical Animal Crematory**.**

Tender Requirements

1. The consultant must demonstrate the capacity to mobilize resources properly so as to complete the assignment on time.
2. The consultant obtaining the highest combined score will be invited for negotiation before awarding the work to the consultant.
3. The consultant should pay Earnest Money Deposit (EMD), including in the KPP portal, in any of the payment modes such as credit card, direct debit, National Electronic Fund Transfer (NEFT), or over the counter (OTC).
4. The entire EMD amount for a particular tender is to be paid in a single transaction. For more details on payment services, refer to the KPP portal.
5. The necessary certificates/documents in support of the pre-qualification criteria fulfilled, as stipulated, shall be scanned and attached to the e-tender documents.
6. During the time of technical evaluation, if the employer finds that any certificate/information furnished is false, such bidders will be disqualified and barred from participating in the bid.
7. If any bidder fails to satisfy the conditions mentioned above, such bids shall be rejected.
8. The consultant/authorized signatory should attach his/her signature to the Schedule B before uploading the documents.
9. If any of the dates mentioned above happen to be a general holiday, then the next working day will hold good.
10. Further information can be obtained from the undersigned during office hours.
11. Conditional tenders are liable to be rejected. The officer competent to accept the tenders shall have the right to reject/cancel any or all tenders without assigning any reasons whatsoever.
12. Corrigendum will be published on the website https://kppp.karnataka.gov.in/ for all modifications or corrections, if any.
13. Typing errors, if any, will not be grounds for any claims by the Consultant.
14. The tenderer is required to ensure browser compatibility of the computer well in advance until the last date and time for the receipt of tenders. The department shall not be responsible for non-accessibility due to internet connectivity issues and technical glitches.
15. Any bidder who is otherwise technically qualified and withdraws from the bidding process at any stage before a final decision is taken on the tender, the EMD of such bidder shall be forfeited, and the name of such bidder shall be removed from the category list of consultants for a minimum period of one year.
16. In case of the death of the consultant, after executing the agreement/commencement of work, his legal heir (if any), an eligible registered consultant, and willing to continue, can execute and complete the work at the accepted tender rates, irrespective of the work.

17. In addition to the soft copies uploaded on the KPP portal, the same shall be submitted (within 48 hours) in a hard-bound form with all pages numbered serially, along with an index of submission.

2. AN OUTLINE OF THE TASKS TO BE CARRIED OUT WHILE PREPARING DPR

a) The consultant should follow, align, and adopt the latest standards and codes including:

a) Indian Public Health Standards (IPHS 2022) (where applicable),
b) IS Codes,
c) National Building Code (NBC),
d) FSSAI guidelines,
e) CPCB and KSPCB norms,
f) And other applicable environmental, safety, and animal welfare regulations.

b) The consultant shall obtain first-hand data from BBMP veterinary departments, and through physical inspection of the proposed Electrical Animal Crematory site. Consultants are **strongly encouraged to visit the site** before submitting the tender.

c) Identify recent trends in **modern electrical animal crematory design**, including hygienic handling, automation, by-product utilization, and energy-efficient systems. Prepare a **concept document** reflecting modern requirements, and review older models/modules for potential improvement.

d) Liaison with all key stakeholders including:

- Veterinary/Public Health Department,
- Electrical Animal Crematory-in-Charge,
- Equipment manufacturers/suppliers (for Electrical Animal Crematory, Core Cremation System, Emissions Control System, Handling, Safety & Sanitationetc.),
- Utility service consultants (Power distribution, water & wastewater, ETP, drainage, and HVAC coordination), to gather specifications and incorporate recent advancements.

e) Conduct a detailed **system study** and propose redesigns/improvements for:

- Automation & Control (Burn-time control, Emission monitoring)
- Ash storage areas,
- Electrical System Design
- Waste management systems,
- Parking, loading/unloading bays, and vehicle movement (including animal carriers).

f) Submit a **comprehensive DPR** covering:

- Concept design for new/upgraded Electrical Animal Crematorium facilities,
- Civil works,
- Parking layout,
- Electrical system with Single Line Diagram (SLD),
- Firefighting, plumbing, and sanitary works,
- STP/ETP for waste treatment,

- Rainwater harvesting,
- Building Management System (BMS),
- Flooring, paints, hygiene & safety provisions,
- Ventilation, lighting, elevators (if multi-level),
- Green building elements, energy conservation, and renewable energy options,
- Solid/biohazard waste disposal and odor control systems.

g) Provide design and construction/Upgradation details for all essential areas such as:

- Animal receiving and lair age,
- Carcass rooms and freezing units(if applicable),
- Waste treatment facility,
- Administrative offices, staff areas, security post,
- Veterinary lab and meat inspection offices,
- Cafeteria, rest areas, laundry, composting or rendering plant.

h) Prepare detailed:

- **Architectural and structural drawings** (site layout, elevations, cross-sections),
- Plans for animal flow and segregation of clean/unclean areas,
- Equipment and furniture layout (as applicable),
- **BOQs** and cost estimates as per KPWD SOR,
- Rate analysis for non-scheduled items,
- Cost optimization strategies.

i) Provide **detailed project costing** including:

- Civil construction,
- Electrical animal crematory machinery and mechanical systems,
- Non-mechanical equipment,
- Furniture, utilities, and renewable energy components,
- Retrofitting or restoration costs if upgrading existing facilities.

j) Prepare and present **PowerPoint updates** during DPR preparation, covering:

- Design brief and concept,
- Methodologies and planning approach,
- Technical challenges and resolutions,
- Architectural and structural innovations,
- Budget and cost estimates.

k) For existing Electrical Animal Crematorium upgrades:

- Conduct **Non-Destructive Testing (NDT)** of structural components,
- Undertake **geo-technical investigation** for new construction,
- Propose required civil repairs, restoration, and retrofitting works.

l) In coordination with veterinary/public health departments, prepare an **equipment plan** detailing the type, capacity, layout, and budget for Electrical Animal Crematory equipment.

m) The consultant shall **advise, support, and present** the DPR to the **BBMP-appointed technical committee** and assist in obtaining approvals, incorporating feedback as required.

n)Determine the recent trends and changes in facility needs and prepare a concept document that can incorporate these changes to build Electrical Animal Crematory in tune with modern requirements. Undertake detailed reviews of old/new modules and provide recommendations for any enhancements/modifications.

o)Liaison with all agencies – Animal husbandry Department/Animal Crematory In charge/Equipment Manufacturers/Equipment vendors/Utility service consultants, etc., and suppliers for details of the recent and new with facilities to be adopted.

p)System study and redesign on the improvement of the vehicle movement facilities. Study crucial requirements in greater detail to be used as a basis for detailed analysis and design.

q) Ensure detailed project cost, inclusive of new or existing Upgradation cost of Electrical Animal Crematoryequipment, non-medical equipment, furniture & fixtures, utilities, etc.

3. Prepare detailed drawings, estimates of cost for technical sanction, and work out BOQ:

a) Prepare all floor plans and elevations of the electrical animal crematoryon an appropriate scale as per the standard designs/drawings with the latest by-laws and FAR (Floor Area Ratio).

b) Building designs shall be as per local zonal regulations and building bye-laws, Indian Public Health Standards (IPHS) 2022, National Building Code, IS Code of Specifications,Animal welfare and public health guidelines(as applicable for Electrical Animal Crematory) Ready for submission to the Local Planning Authorityfor approval.

c) Detailed system study and re-design of existing and new electrical animal crematory.BBMP will provide the list of facilities in scope.

d) Layout plan indicating approach road, compound wall, drainage, external electrification, water supply, and sanitary services. Provision should be made to have a captive solar power plant. The consultant should closely interact with the department before finalizing the layout.

e)Space Planning & Data Collection

- Plan space to improve efficiency and increase throughput, Conduct **interviews** with:
  - Facility Managers
  - Animal crematorium consultants
  - Municipal authorities
- Carry out **physical and functional evaluation** of existing facilities with input from:
  - Architect
  - Civil Engineer
  - Equipment experts
  - Animal Crematory in-charge

f)Planning and design of the entire terrace to ensure that it is absolutely leak proof in terms of drainage, with proper slopes maintained.

g) Cross-sections and longitudinal sections in appropriate scale for all civil and infrastructure works.

h) Complete bill of quantities for all internal and external items suitable for incorporation in the tender documents. Detailed working drawings, structural designs, bill of quantities for civil, internal electrical, internal water supply, and internal sanitary items as per working drawings. Complete BOQ for all services like MEP (Mechanical, Electrical, and Plumbing) – HVAC work plus heat load calculations, UPS,Fire Fighting Devices, Fireand veterinary equipment.

i) Estimate cost as per BOQ will be worked out based on the current KPWD Schedule of Rates (SOR), including lead, lift, and area weight age applicable to the area, approved by the Superintending Engineer of the KPWD who has jurisdiction over the proposed site. For any item not covered by the Schedule of Rates, the rates should be derived based on market rates/data rates by quotations with correct specifications, and the same will be approved in consultation with the concerned SE, KPWD or any competent authority.

4. Prepare and submit the draft tender documents:

a)Prepare the finalized specifications, drawings, and estimate of cost.

b) Modify the technical specifications, drawings, and estimates of cost, BOQ (for internal and external services), as per feedback or comments communicated by BBMP or their authorized representative.

c) Prepare the appropriate packages in consultation with BBMP for calling tenders.

d) Prepare the draft tender document for the approved works based on GOK mandated tender document (K/W-4) and circulars issued from time to time and duly modified to suit the e-procurement procedures of GOK. Submit the same to BBMP for review and approval.

e) Modify the draft tender documents as per feedback or comments as may be communicated by BBMP or their authorized representative.

f) Finalize the documents as well as the dates in consultation and attend pre-bid meetings as may be convened by BBMP, explaining the features of the document to prospective tenderers and prepare and issue amendments, if any, to the tender document.

5. Post-Tender Stage:

a) Furnish all the required construction drawings for the execution of the project, including the drawings that would be submitted for sanction to the local authorities concerned.

b) If there are changes in the layout/building plan during execution, the DPR Consultant shall conduct a re-survey, if required by BBMP, and prepare the modified plans. Work out and submit the financial implications in consultation with the BBMP and the Project Management Consultant for approval.

6. ARCHITECTURAL WORKING DRAWINGS AND ESTIMATES:

Drawings required for construction purposes:

a) Functional Area Design Drawings

Prepare detailed architectural drawings with specifications and estimates for the followingkey functional and supporting areas**:**

- Reception/Entry Checkpoint (animal reception and documentation)
- Preparation Room(Designed for ergonomic workflow with minimal operator strain)
- Cremation Chamber(Electrical cremator equipment (retort), control panel, electrical switchgear, and exhaust flue)
- Ante-Mortem Inspection Room
- Emissions & Pollution Control (Monitoring instruments and sensors for continuous emission control)
- Utility and Power Distribution(Backup generator or UPS capacity for control and monitoring systems)
- Wiring designed for high amperage loads and safety ground redundancy
- Waste Management Zone (Ash Pit)
- Support & Administrative Zone(Utility rooms, cloakrooms, and toilets for visitors and personnel)
- Disinfection Room
- Cleaning & Tool Sterilization Rooms
- Animal Loading/Unloading Docks**.**

b) Demarcation plan for land boundary. Demarcation plans for layout (including circulation pattern plan) and buildings.

c) Excavation plan, foundation details, and section of buildings.

d) All floor plans reflected ceiling plans, including roof/terrace plans, and door & window schedules.

e)All side elevations, including finishes for external surfaces.

f) Toilet Details, Drawings forstaffrestrooms & workers' hygiene blocks**:**

- WC layout, urinals, shower cubicles, hand wash basins
- Anti-skid flooring & wall cladding
- Accessories: towel ring, mirror, soap tray, etc

h) Staircase Details – Including details of treads/risers, finishes, hand-railing, parapet, etc.

i) Doors – Joinery details including schedule of fittings and fixtures.

j) Windows – Joinery details including design/details for grills, schedule of fittings, and fixtures.

k) Misc. Details – Parapets, balcony railings, cupboards, wardrobes, pelmets, lofts, shelves, boundary wall, gate pillars, gate details, etc.

l) Part Details – For plan, elevation, sections with 1:50, 1:25 FS details to explain the construction system as required.

m) Details – Plan, elevation, sections of septic tanks, treatment plants, overhead and/or underground water tank, and pump room, etc.

7. STRUCTURAL ENGINEERING DRAWINGS WORKING DRAWING (STRUCTURAL)

a) Foundation details, sections and footings, columns, slab and beam with sections.

b) All floor plans – RCC details for all floors, columns, beams, slabs, lintels, shelves, lofts, canopies over entrances as per Electrical Animal Crematory.

c) RCC details for slabs wherever floor traps or sewerage pipes are required to be laid by sinking the floor or laying the floor to slope.

d) RCC details for platform/lofts/storage shelves, if proposed.

e) Structural details of Overhead/Underground water tank.

f) All designs and construction should be such that buildings are earthquake resistant as required under the relevant ISI code.

8. ELECTRICAL DRAWINGS WORKING DRAWINGS (ELECTRICAL)

a)All floor plans showing locations and layout of electrical conduits/surface wiring, switch and sockets, wall brackets, fans, etc., with specifications, telephone/fire alarm system, etc.

b) Electrical load data sheet, LT and HT, SLD for external and internal electrical work and complete BOQ, Power for each block: Electrical animal crematory, ETP, floor plans with electrical layout, layout of outdoor S/S, layout of electrical rooms/UPS, networking drawings, etc.

c) Details for water heater and damp zone safety /geyser socket, location, etc., considering safety from electrification through damp conditions, etc.

d) Positions of conduits/staircase lighting/two-way switches, etc.

e) Electrical details for misc. details wherever required (e.g., switches and lights in compound wall/gate pillars/entrance porch, bell pushes, etc.)

f) Details of electrical meters/distribution boards, etc.

g) Electrical details as required for pump room, server room, and LT and HT yard, etc.

9. UTILITY SERVICES DRAWINGS WORKING DRAWINGS (UTILITIES)

a) Detailed layout plan for external water supply mains and distribution with sections, etc.

b) Detailed layout plan for open/underground with location details of manholes and details to dispose the sewage with sections, solid waste management system in place, etc.

c) Detailed plan and sections of water treatment/sewage treatment plant, lead off of effluent, etc.

d) Detailed plan and sections of water storage reservoirs, etc.

e) All floor plans and sections with positions, specifications for ducting, piping, heating/air conditioning, etc.

f) All elevations showing spouts/down-take pipes, etc.

g) Toilet details – water supply, sanitation and drainage for buildings, etc.

h) Services, ducts, under staircase/landing levels, adjoining lift wells, etc.

i) Details of position of water meter, etc.

j) Details of fittings in connection with water supply and plumbing, etc.

k) Details of landscape/arboriculture with details of species of plants, tree guards, etc

10. COMPLETION DRAWINGS:

a) Complete plans, elevations, etc., as required by local authority to obtain the completion and occupancy certificates of buildings.

11. SCALE OF THE DRAWING AND CODES TO BE ASSIGNED TO THE WORKS:

a) Building plans to a scale of 1:100 showing Cross Section, Longitudinal Section, Site plan, front and side elevations, plinth areas, covered area, FAR Schedule of joinery, and other details in one sheet.

b) Working drawing to a scale of 1:50.

c) All the drawings submitted shall be categorized in codes so that all the sets in the category of the drawings to be submitted carry the same code. The code preferably should be based on alphabetical categorizations.

12. LANDSCAPE:

a) Preparation of detailed landscape design scheme for the layouts using computer-aided design including water cascades/water bodies, fountains, and all types of plants required by the BBMP.

13. LOCATION OF CONSULTANTS OFFICE AND AVAILABILITY OF SERVICE:

a) The Consultant should have their office in Bangalore, and the BBMP will be entitled to take the services of the Consultant at the Bangalore office at different stages of the DPR preparation.

14. DELIVERABLES:

For the scope of services covered, the Consultant shall also submit the following without any extra cost to BBMP:

(a) Concept project report and drawings for approval in Five (05) sets.

(b) Final Detailed Project Report in Five (05) sets and Tender Documents with special conditions of contract, if any, qualifying requirements of the contractor, tender drawing prints in Five sets along with original drawings on good quality tracing film (85-90 gateway) or Garware Polyester film and all records on two sets of Memory Drives.

Appendix B: Reporting Requirements

FINAL OUTPUTS(i.e., REPORTS, DRAWINGS, etc.)THAT WILL BE REQUIRED OF THE CONSULTANT

No	DescriptionofDeliverables	TimeDuration
1	ConceptReport	5DaysfromDateofIssueofWorkOrder/Agreement
2	NDT ,Survey &Investigation Report	15 Days from Date of Issue of Work Order/Agreement
3	Master Plan	20 Days from Date of Issue of Work Order/Agreement
4	GAD/Layout Drawings	25 Days from Date of Issue of Work Order/Agreement
5	Draft Detailed Project Report	30 Days from Date of Issue of Work Order/Agreement
6	Final Detailed Project Report	40 Days from Date of Issue of Work Order/Agreement
7	Draft Tender Papers	43 Days from Date of Issue of Work Order/Agreement
8	Final Tender papers	45 Days from Date of Issue of Work Order/Agreement

Appendix C:Key Personnel and Sub-consultants

The number of points to be given for qualifications and competence of the key professional staff for the assignments are:

Sl.No.	Key professional	Qualification	Nos	Experience	Months
1	Project co-coordinator cum Chief Architect	B.Archor M.Arch from recognized University	2	Minimum10Year Experience.	6
2	Senior Structural Design Engineer	M.E in Structural engineering equivalent from recognized University	3	Morethan10Year Experiences	3
3	Geotechnical Engineer	M.E in Geotechnical engineering equivalent from Recognized University	1	Minimum10Year Experience.	3

4	Civil /Quantity SurveyingEngineer	B.EinCivilengineeringor equivalentfromrecognized University	4	Morethan10Year Experiences	3
5	Electrical Engineer	B.E in Electrical engineering or equivalent from recognized University	2	Minimum10Year Experience.	3
6	MEP/Sanitary Engineer (Water supply, Sanitary, Solid waste Management, Fire Fighting & HVAC)	B.E in Civil/Mechanical engineeringorequivalentfrom RecognizedUniversity	2	Morethan10Year Experiences	3

Appendix D: Services and facilities to be provided by the Client

1. Doubt or Questions clarification within the scope of DPR
2. Engagement with Electrical Animal Crematory and modern abattoir Representatives to collect data

Appendix E: Cost Estimates in Indian Rupees